Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1.- 17. (cancelled)

Claim 18. (New) A method for controlling a power supply of a mobile device having at least one electric drive motor and a hybrid power supply system which includes a fuel cell system and a dynamic power system, wherein electrical outputs of the fuel cell system are connected to one side of a power converter whose other side feeds the drive motor which is controlled by a motor control unit, and wherein the dynamic power system has a storage battery which is connected to one side of a d.c./d.c converter whose other side is connected to the electrical outputs of the fuel cell system and to one side of the power converter, method comprising:

for a particular setpoint power request, processing a plurality of signals to determine components of the requested setpoint power that will be provided, respectively, by the fuel cell system and by the dynamic power system, said plurality of signals including signals which are generated by a signal transmitter for requesting the setpoint power of the drive motor, a signal from an operating mode switch which has a plurality of selectable settings that are each assigned to different types of dynamic behavior of the device, signals from

power sensors for output current and output voltage of the fuel cell and signals from a sensor for the velocity of the mobile device;

when there is a change in the setpoint power, said storage battery supplying power equal to a difference between a partial power which can be generated by the fuel cell system, with a delay according to response function, and the setpoint power, by applying corresponding setpoint values to the d.c./d.c. converter, considering the power of the drive motor which has already been output and the power of the fuel cell system which has already been generated, as well as the velocity of the device, and taking into account the selected type of dynamic behavior and the different response functions of the fuel cell system and of the dynamic power system.

Claim 19. (New) The method as claimed in claim 18, wherein, in the case of a sudden increase or decrease in the setpoint power, a corresponding increase or decrease in the current flowing out of or into the storage battery via the d.c./d.c. converter is limited to a maximum prescribable charge or discharge current.

Claim 20. (New) The method as claimed in claim 18, further comprising:

a vehicle control unit of the mobile device superimposing load current values of further loads in the device on power demand values for the drive motor;

feeding a result of said superimposing, together with a charge current value generated when necessary by a battery management system, to a power control unit, with limitation to a fuel cell maximum power value of a power control unit, which power control unit also receives velocity values, torque setpoint values from a setpoint value signal transmitter, battery charge state values and values of an operating mode selector switch for setting various types of dynamic behavior;

the power control unit calculating, as a function of the fed values, the values of the overall power demand and of the power demand which is to be contributed by the fuel cell system taking into account its inertia behavior and a selected dynamic behavior; and

said power control unit outputting corresponding setpoint values to the actuating elements of the fuel cell system; wherein,

in each case values of the current which is output by the fuel cell are determined and subtracted from a value of current required by the drive motor, and are fed as current setpoint values to the d.c./d.c. converter with

limitation to a maximum specifiable discharge current or charge current of the storage battery.

Claim 21. (Currently Amended) The method as claimed in claim 18, wherein:

a sum of the current which is drawn from the drive motor via the power converter and currents which are drawn from the other loads of the device are subtracted from a value of the current which is output by the fuel cell;

when a maximum predefinable value of discharge current of the storage battery is reached, it is limited to its discharge current; and

a result of the difference between the currents which are drawn from the further loads is added to the value of the available fuel cell current, and signaled to the control unit of the device as an available value of the current.

Claim 22. (New) The method as claimed in claim 18, wherein:

the response function of the fuel cell system is simulated as a controlled system using a memory element of the n-th order;

the torque setpoint values which are output by the vehicle control unit of the mobile device are applied to the memory element and to a control unit for the dynamic power system;

values generated according to the transition function of the controlled system are also fed to the control unit; and

current which is to be applied by the dynamic power system can be fed as a current setpoint value to the d.c./d.c. converter by the control unit by means of a limiter element which can be set to at least two ramps with different gradients as a function of control signals from the device.

Claim 23. (New) The method as claimed in claim 18, wherein, during an acceleration of the device, when the setpoint torque is determined by the vehicle control unit by pilot control and a maximum current for the generation of the setpoint torque is determined from a characteristic diagram with the torque as a function of the maximum current and the rotational speed, a difference between current generated by the fuel cell system during the acceleration process and overall current required by the dynamic power system according to the characteristic diagram in order to achieve the high acceleration is generated.

Claim 24. (Currently Amended) The method as claimed in claim 18, wherein:

when there is a reduction in setpoint torque to be output by the drive motor, current necessary for the lower torque is determined from the characteristic diagram; and

with reference to a load state of the fuel cell system given a preset torque setpoint value and existing storage capacity of the storage battery, the storage battery is charged with the maximum prescribable charge current by means of the d.c./d.c. converter after a reversal of the flow of current in the power converter in the braking mode of the drive motor and the fuel cell system is set to current which is necessary for the lower setpoint torque.

Claim 25. (Currently Amended) The method as claimed in claim 18, wherein:

direction of the supply of combustion gas and air to the fuel cell is reversed periodically; and

during a reversal of the supply of gas a current pulse which is matched to instantaneous output of current of the fuel cell system or of the dynamic power system directly before the changeover, is fed in to the power converter by the dynamic power system via the d.c./d.c. converter.

Claim 26. (New) The method as claimed in claim 1, wherein:

output voltage of the fuel cell system is monitored to determine when a voltage limiting value which is permissible for satisfactory operation is reached or undershot; and

when the voltage limiting value is reached or undershot, the voltage in the power system which is connected to the output of the fuel cell is regulated to at least the permissible limiting value by feeding in current via the d.c./d.c. converter.

Claim 27. (New) The method as claimed in claim 18, wherein:

a load situation of the power supply system during an intervention of the regulating process and a frequency of intervention of the voltage regulating process during the operation of the power supply system are registered; and

after a predefinable number of interventions has been exceeded, dynamics are reduced by reducing a rate of increase in the current of the fuel cell system and/or the dynamic power system and the magnitude of the power which is output.

Claim 28. (New) The method as claimed in claim 18, wherein:

a rate of increase in the output power of the fuel cell system given sufficient storage battery charge when the torque setpoint value is increased is limited; and

current which is necessary to generate the torque setpoint value is generated by the dynamic power system during an increase.

Claim 29. (New) The method as claimed in claim 18, wherein:

at least three operating modes for the drive motor can be set by means of the operating mode selector switch;

a first operating mode is aimed at a high level of dynamics of the device;

a second operating mode is aimed at a low level of dynamics of the device;

a third operating mode is aimed at a stop and go operation; and when accelerations occur in the stop and go operating mode, currents are generated by the dynamic power system and stored therein during braking.

Claim 30. (New) The method as claimed in claim 18, wherein a portion of the current to be applied by the dynamic power system, which comprises current necessary to generate a requested drive power with an existing actual value of the current consumed by the device and the current available from the fuel cell system, is determined.

Claim 31. (New) The method as claimed in claim 18, wherein an emergency operating mode of the power supply system is ensured by a voltage regulating process in the power system at the input of the power converter by

means of the d.c./d.c. converter and feeding of the current from the storage battery.

Claim 32. (New) An apparatus for controlling a power supply of a device having at least one electric drive motor and a hybrid power supply system which includes a fuel cell system and a dynamic power system, wherein electrical outputs of the fuel cell system are connected to one side of a power converter whose other side feeds the drive motor which is controlled by a motor control unit, and wherein the dynamic power system has a storage battery which is connected to one side of a d.c./d.c converter whose other side is connected to the electrical outputs of the fuel cell system and to one side of the power converter, wherein:

a vehicle control unit which is connected to a velocity sensor of the mobile device and to a signal transmitter for a setpoint torque to be generated by the drive motor, is provided for setting a setpoint torque of an motor control unit and for determining current setpoint values for the mobile device which are stored in a characteristic diagram for torque setpoint values and rotational speed values;

the vehicle control unit is connected to a power control unit which is connected to the fuel cell system, a battery management system for the storage battery and to the d.c./d.c. converter;

current which is output by the fuel cell is measured and is fed as a fuel cell current value to the power control unit;

current of the drive motor is measured upstream of the power converter and is fed as a driving current value to the power control unit;

current of the other loads is measured or calculated and fed to the power control unit as a composite current value;

an operating mode selector switch for setting various operating modes of the power supply system is connected to the power control unit;

values from the battery management system relating to the charge state of the storage battery and values relating to the maximum prescribable charge current and discharge current are fed to a power flux controller;

a power setpoint value, fuel cell current, driving current, a composite current value, an operating mode which is set, a charge state value and the maximum prescribed values of the charge current and discharge current are processed in the power control unit and in an associated power flux controller with one or more programs, such that, when there is a change in the setpoint power a difference between partial power which can be generated by the fuel cell system, with a delay according to the response function, and the setpoint power is generated by the storage battery of the dynamic power system by applying corresponding setpoint values to the d.c./d.c. converter, with reference to the

power of the drive motor which has already been output and the power of the fuel cell system which has already been generated as well as the velocity of the device, and taking into account the selected type of dynamic behavior and the different transition functions of the fuel cell system and of the dynamic power system.

Claim 33. (New) The apparatus as claimed in claim 32, wherein the mobile device is a motor vehicle.

Claim 34. (New) The apparatus as claimed in claim 32, wherein the mobile device is a forklift truck.